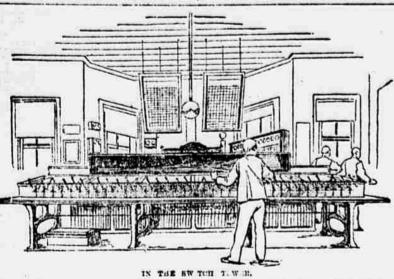
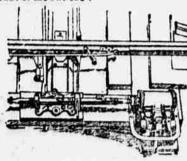
SWITCHING THAT IS EXTRA.

WONDERFUL AID FROM ELECTRICITY
AND COMPRESSED AIR.

Tens of Steel Moved by the Tomeh of a Finger-A Look Into Tower A of the Pennsylvania Terminus in Jerrey City.
A very few years ago the complicated system of switches at the Jerrey City terminus of the Pennsylvania Railroad, just where the tracks branch like a fan before entering the station, was worked by many hands. That is, there was no tower in which the switches and simulated of the eatire system were controlled. Scores of switchmen were employed upon the tracks at the actual switches, which they turned sowarstely. Communication was carried on among these men by a code of arm-swinging by day and lamp-awinging by night, and trains were signalled in the same manner.

There was a big advance when the now prevalent interlocking system of switching came in. This gathered a! the switches in one from, where they were manipulated in a certain order fixed for each series of combinations asseded in the yard. The mechanism was so arranged that the switchman, having once begun to work out a combination of switches, which would, for example, eventually make a continuous track completely across the varid, could not move any but the correct switches to a third, coming perhaps in an opposite director of a third, coming perhaps in an opposite director of a third, coming perhaps in an opposite director of a third, coming perhaps in an opposite director of a third, coming perhaps in an opposite director of a third, coming perhaps in an opposite director of a third, coming perhaps in an opposite director of a third, coming perhaps in an opposite director of a third, coming perhaps in an opposite director of a third, coming perhaps in an opposite director of a third, coming perhaps in an opposite director of a third, coming perhaps in an opposite director of a third, coming perhaps in an opposite director of a third, coming perhaps in an opposite director of a third, coming perhaps in an opposite director of a third, coming perhaps in an opposite dire





The terminal towar, called "Tower A" officially, is a small brick building the seguidatory of which has a chass front and sides. It stands on the south of the tracks and is hidden from view by buildings on Montgomery street. It is the largest of the three switch towers and the most important, a nest it controls the committed metwork of switches in from of the starten. The switchboard in this tower is a table about ten feet in length and a foot in thekeness. On the outer edge are seventy-one little brass levers, mone of them more than four inches long. Any one of them more than four inches long. Any one of them can be moved by a finger and at a single expense of force. Thirty-six o the levers move the seventy-flive switches in the yard and their combinations. The thirty-flve other levers move the signals. Some of the levers which can be turned by a finger, move many switches. One, for instance, turows two single and two deaths a switches, this meaning the moving of many tone of sould steel. For the deutie switches are complicated contrivances. This single little lever, turned by a finger, therefore dees wolk which would require the combined physical power of half a dozon or more men if attempted by a first muscular effort.

The solution of this seeming impossibility is very say. The tiny lever, when turned, completes an electric circuit in a wire attenting an electro-magnet attached to a cylinder at the switch. The cylinder is filled with compressed sir. The circums attached to a cylinder at the switch maches attached to a cylinder at the switch. The cylinder is filled with compressed air. The electro-magnet attached to a cylinder at the switch maches and signals by the electric fluid into systems in such a way that the were turning of a single tiny lever in the signal tower will make a continuous track through a massing of a single tiny lever in the signal tower will make a continuous track through a massing of a single tiny lever in the signals. The same time show the proper signals to the approaching the oper THE SWITCH VAL E.

accomplish the result. If he pulled at a wrong switch it would refuse to move. At the same time signals on posts were devised which could also be worked by lowers in the tower. The same signals on posts were devised which could also be worked by lowers in the tower. The same signals or posts were devised which could also be worked by lowers in the tower. The same signals or each combination followed each other in order.

This test the system which has been in one work all the big roads of the country and many cold system in England, but Americans were allow to adout it. Its chief fault was that it increased rather than decreased the private pulled over pulleys, and were any to become ledged now of rozons motionless. secretary pulled over pulleys, and were any to become ledged now of rozons motionless. secretary pulled over pulleys, and were any to become ledged now of rozons motionless. secretary pulled over pulleys, and were any to become ledged now of rozons motionless. secretary pulled over pulleys, and were any to become ledged now of rozons motionless. secretary pulled over pulleys, and were any to become ledged now of rozons motionless. secretary pulled over pulleys, and were any to become ledged now of rozons motionless. secretary pulled over pulleys, and were any to become ledged now of rozons motionless. secretary pulled over pulleys, and were any to become ledged now frozons motionless. secretary pulled over pulleys, and were any to become ledged now frozons motionless. secretary pulled over pulleys, and were any to become ledged now frozons motionless. secretary pulled over pulleys, and were any to become ledged now frozons motionless. secretary pulled over pulleys, and the secretary pulled over pulleys, and the secretary pulled over pulleys, and the secretary pulled over pulleys and the secretary pulled over pulleys. The secretary pulled over pulleys and the secretary pulled over pulleys and the secretary pulled over pulleys and the secretary pulled over pulled secretary pulled to secretary pulled t

STAND UP AND BE HANDSOME. An Observer's Comments on the Bad Car-

Two men sat in an east side park watching the people sitting or standing about and the children at noisey and active play. "Have you noticed," said one of the men, "how differ-ently these people stand at different ages? Or, to be more general, have you noticed how badly people stand or carry themselves in

walking as they grow older.
"Now take those very young children rolling that ball about. Their movements are per-fectly graceful. They stand erectly, with shoulders thrown back and abdomens in. They stoop, they run, they dodge in lines that are artistic. They show the natural case and

grace of all animals. "But see that girl running this way. In her sixteen years she has learned a lot of bad tricks. See how she throws her less and twists ber hips. Her chest is knocked in and she presents a most ungraceful appearance. There comes a shop girl. Her walk is horrible. Her shoulders and hips wiggle about. Her abdomen is pushed out. Her shoulders are caved She has learned to be ungraceful. And that older woman there, whose form is begin-ning to spread with the fulness of maturer age-her pose is an aggravation of the pose of

e shop girl.
"All this comes through corsets. Women have to depend upon the correts for the support of the apper part of the body. They rest their shoulders upon the upper part of the steel casing, and it presses down and pushes out their abdomens. But they are past all cure. It is to the young girls that I object. No amount of beauty of face could make a girl who walks that way attractive, and it kills the last chance for an ugly woman to attract. They learn the trick from their mothers, and they learn it young. There is a child only six years old who stands with her chest in and her ab-

old who stands with her chest in and her abdomen out.

"You find this same tendency among fat men. They are inclined to hump their chests upon their stomachs for support, and the result is that they aggravate the misfortunes of iat. Nor is this bad carriage inclined to the working neople. It is frue that there are some working neople. It is frue that there are some working neople. It is frue that there are some working neople. It is frue that there are a score with bad carriage where there is one of the other kind. How many restry faces are a score with bad carriage where there is one of the other kind. How many restry faces are spolled in this way, and how many women might make themselves attractive if they only would quit relying upon the corrests for support. As for men, this way of walking is so common that a man who walks creelly becomes marked, and his bearing suggests haughtlaces."

ALL DONE WITH THE FINGERS THE MANNER IN WHICH TANK ADAMS TOYS WITH THE SPHERES.

The Pamous Player to Erect an Amphithe-atro Here-A Number of His Shots Il-lustrated-His Match With Sexton.

Yank Adams, the greatest of all digit billiard Pank Adams, the greatest of an algebraic players, who recently sold his White Elephant room in Chicago, has been in the city for the past fortnight in search of a location to open an ampitheatre devoted entirely to exhibitions and matches, similar to those run in Paris and London, with a nool room connection used only in case of billiard matches for money.

There is no doubt that Yank Adams has a repertory of shots more extensive than the en-

tire billiard fraternity put together. It is no uncommon occurence for him to request his sudiences to place the balls in such a position that it would appear seemingly impossible to effect a carrom. Yet he makes the shot generally at the first attempt. His list of 500 fancy shots just earry him through a week's play, allowing a change of eighty shots nightly.



TANK ADAMS.

Among his difficult feats are: Two quart wine bottles are piaced at the short end of the table, three feet amart; a ball is placed on the typ of each bottle, and a third ball, six feet from the buttles, in the opposite corper. Adams makes the hand ball jump from bottle to bottle, then to take an English in space, counting on the third ball, a druble shot.

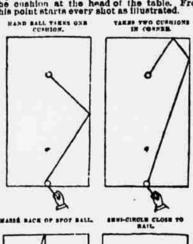
Fifteen balls are placed in a line, three inches apart. On the last ball is placed a plece of chalk, while two feet from the other end, at a square angle, is placed a sincle ball. Yank drops the hand ball with a mease twist, which, after hitting the single ball, describes a semi-circle, takes the cushion first, then makes a carrom on the fifteen balls, but is played with such a delicate calculation as barely to reach the last ball; in fact, freezes against it so gently as not to dislodge the chalk previously placed thereon.

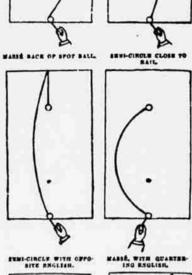
A derby hat is placed on the table, under which is a ball. One foot from the bat are two balls a foot anart, which he carroms on, the hand ball continues striking the rim of the hat, forces it un, and goes under making the stroke on the third ball, then recurns from under the hat when it rocks the second time.

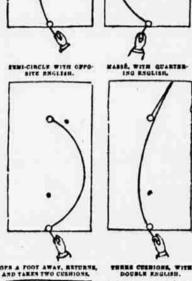
He elso atands at the head of the table, throwing the tails with a hundred-yard force, but has them stop eight feet away in such a position as to spell his name.

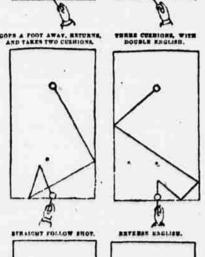
During the past month Adams has perfected a brand new play, which he terms "a baker's dozen ways of making one-hot." One red ball is placed on the spot, the other frozen against the oushion at the head of the table. From this point starts every shot as illustrated.

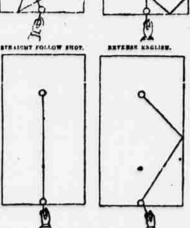
HAND BALL TARKS ONE TARKS WE CERRIONS



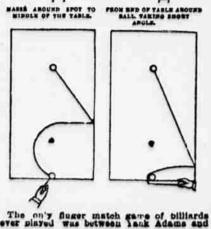




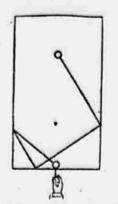








William Sexton, at the Madison Square Gar-den, in 1878, for gate receipts. It was a straight rail game. Adam-played 2,000 points against Sexton's 1,000. Adams scored an un-broken run of 1,184, and yet only beat Sexton seven points.



In 1877 Adams opened a pleer in this city over O'Connor Brothers, on Union aguars. An amphitheatre was built over the billiard room, with a seating caractiv of 500. Adams gave exhibitions there for three months, and would have remained longer but for an engagement proviously made to visit San Francisco, where he played for nearly half a year.

George Slosson says that Yank Adams is the greatest exhibition player who ever lived.

TWO FEET IN THE GRAVE.

Likewise One Arm, and the Rest of Riu Sees that the Grave is Kept Green.

From the St. Louis Chrenicle.

Just as day was dawning this morning William P. Parkes, who is nearly 70 years old, or that portion of him which still lives, was found by Henry Murphy, a gravedigger, lying unconscious upon Parkes's own grave, in a re-mote part of Calvary Cemeters.

The unconscious man had but one arm, no legs whatever, and a portion of his left shoul-

der had been cut away by surgeons' knives. He had fallen from his little wheel chair into his grave and had evidently lain there all night. The dead portion of Mr. Parks lay buried in a rosewood coffin in the grave upor which he was found. He had come, as was his custom, to decorate and care for his own grave, and had fainte i while trying to pull up a very stubborn weed.

Mr. Parkes was carried to the gate house, and afterwa d to a neighboring residence.

With the help of a physician he was revived after an hours hard work. After a tew hours rest fir. Farkes was taken to his home, in a humble little abode, hardly hulf a mile from the context of the carriers of the context of the

With the help of a physician he was revived after an hours hard work. After a lew hours' rest Mr. Farkes was taken to his home, in a humble little abode, hardly half a mile from the cemetery gate.

The story of Mr. Parkes's life and his queer mania is indeed a remarkable and interesting one. Half of him is dead and burled, but in the rosewood coffin, which he purchased himself, there is still room enough for the rest of him when life passes away. He was his own undertaker, and one shroud will suffice for him, yet he will have two innersis.

Mr. Parkes was born in a suburb of Detroit. Mich., a little less than seven'y years ago. His father was well to do. When he graduated from school—the story is told by himself—he refused to attent college, and seent all his time breaking colts and training trotters.

When but twenty years old he married Bessie Woodruff, whom he had known alloe lafancy. This was but the commencement of his matrimonial career.

Mr. Parkes lost his first wife a year after he married her, and shortly after her death he met with his first accident. While riding a half-broken colt one day, the horse suddenly shied and threw him to the ground, breaking his left leg. The surgeon who was called to attend him set the leg wrong, and it was nocessary to break it again. The operation was not a success, and blood bolsoning set in, his foot swelled and mortified, and in order to save his life the doctors amputated the regard that it was extending further apptings. They thought they had stopped the progress of the polson, but in a lew days it became apparent that it was extending further apptings. A week afterward they ammutated the leg at the knew. After a month of suffering the wound healed up, and a short time after that the deadly polson again dommenced to work. After a lengthy consultation the physicians decided to cut the leg entirely off. This they did not be burled. After much arguing his wish was graviled, his leg, in three pieces, being burled in a neighboring cemeter.

When half way to his destina

Lor may lour the best surgeons that could be piccused inhored to save his remaining legs. At the end they were compelled to amputate the leg close to the tody. The grave was opened and the log buried with the other, leaving Mr. Parkes a man without legs.

He was now almost entirely helpiess, and for a year he remained in his lather's house, almost without a hope, and longing for doth. Similar the leg of the leg of

JCATION FOR ALL

***EASTERN OF THE PATAMONE STATES**

***APPLICATION FOR ALL

More than 100 laboring men, who have had no opportunity to extend their search for knowledge beyond the public schools, are studying the course pre-cribed by Harvard's curriculum. They cannot receive the degrees A. R. or A. M. but they can get just as much good out of the study as the students who pay the raily for the privilege. And they can eajoy this privilege without sacrificing their pride or their independence. At the rooms of the Union all men are equal. The college professor is no better than the humblest day laborer; the Harvard student is on an equal footing with the peannt vender. The Harvard professors and the Harvard students pay the same amount for the privilege of teaching as the other members pay for the privilege of learning. But the advantges are not by any means confined to one side. The professors and students have profited by the contact with the sturdy tollers or a lower social standing. They have found men in their classes who are as keen as their own college men, who are thoroughly posted on the practical side of the great economic questions of the day, who can reply to theories with nuggests of wisdom gained from experience, who have put their shoulders to the wheel, and know just how much of an outlay of money and atrength it requires to keep soul and body together. These men, although they have had no "book larnin" are able to cope successfully in debate with college professors, and more than once the college professors.

getter. These man, attnough they have had no book intmin." are able to cope successfully in debate with college professors, and more than once-the college men have found themselves unable to reply to the arguments of their pupils.

This unique educational scheme was started early in February. The man who more than any one size, is to be credited with the good work is Robert F. Ely, a graduate of Amherst College and a student in the graduate course in the Harvard Divinity School. For the last two years he has been laboring monag the working people, caring for their spiritual need, and doing what he could to better their condition, socially and mentally. A close student of human nature, he saw great need of removing the feeling of distrust and hatred of the "higher classes." He felt that this distrust was born of ignorance, and he puzzled his brain for a remedy. He was acquainted with the good results wrought in London by Toynbee Hail, and he saw no reason why the same system of reform could not be inaugurated in Cambridge. There was the college, with its large corns of instructors and its small army of students. There too, was the mass of working people, who knew nothing of student life except as they saw it exemplified on the all-night horse car and in the police court. Noither class knew the real merit, the sierling worth of the great body comprising the other class. There was as wide a gap as there could be between two classes of people residing in the same city. It seemed an heroulean undertaking to wipe out the prejudices of a generation, but Mr. Ely doesn't know the meaning of the word fear.

Mr. Ely had already taken rooms in the Prospet House on Main street and fluds were quickly contributed for the purpose of putting the organization on its feet. Four rooms were secured on the second floor of the Prospect House, and there the movement was insagurated. At first it was decided to call the organization the University Extension Sciency, but a batter name, the Prospect House, and there the movement was insag LISKETT.

I would like to become an active member of the Pros-Kame. Residence.... Proposed by... Cambridge

mentary French. Italian; 9 to 10. Vocal masic.

Bellow Age — To 8. history; 8 to 9. political economy, penmanehip; 9 to 10. English grammar and composition.

It has been the aim of the managers to have the classes small, or divided into a mail sections the testing of the control of the control of the control of the testing ourses outlined above, private individual instruction is given to about wonly men elither at the Proposet House or by students at their rooms. The would-be crive the work of the control of th



Crampel's party had great success and influence among the natives on account of his tattoo marks, which resembled those among the Haussa, a famous people living in the northern

part of the Soudan. These and other facts proved the existence of relations between the people of the upper Mobangi basin and the tribes to the far north. He found also asses and cattle used as beasts of burden, and guns like those in southern Algeria. He saw the curious structures made of bark and built in the limbs of trees. These structures were seen by Grenfell further south, and were described by Nachtigal upon his visit to the southern regions of the Soudan. The buildings are of vines, and the old men of the vile lages, provided with an abundance of pole-oned arrows, and of wooden javelins whose points are hardened by fire, constantly occupy these lofty posts of observation and sound sa alarm by trumpet or drum at the first appearance of strangura. Upon the first alarm, the women disappear in the forest, bent nearly double with the weight of children upon their backs, while the men spring behind the pallsades that surround their villages and are ready to defend their homes.

We have no knowledge of the Matonga natives who are said to have killed and eaten the Crampel expedition. If the news is correct, the tragedy must have occurred somewhere near the border of Baghirmi. Disaster to the expedition will be regarded by the French as a great misfortune. They had depended upon Crampel to see that France was not left behind in the exciting race for Lake Tchad, in which the Germans and English are also engaged. They fully expected that Crampel would be able to add a large domain to French territory.
In order to put into immediate effect the treaties he might secure. an expedition was secretly sent out from France early this year secretly sent out from France early this year to follow in Crampel's footsteps. The Committee of French Africa had the enterprise in hand. It was not in charge of five white mea, who secured at St. Louis, Benegai, the solders they required, and at Longo enhisted a large force of porters. It was not till then that the purposes of the expedition were known. By this time it has probably reached Crampel's base of operations on the Mobangi. If it has not aiready started atong his nath toward lake Tchad. Its equipment in all respects was larger than that of the bioneer on this route. The expedition was instructed to strengthen all agreements he had made with the natives, to establish a number of trading nosts among them, to buy their ivory and other goods which would bear transport to the sea, to take handsome presens at othe chiefs, and to leave little detachments of the Senegalese military at the posts for the purpose of insuring French supermacy. It is probable that this exiedition if Crampel is dead, will endeavor to carry out his work. It is selected by armose, and by the superiority of its weapons could probably master any of duary force it might meet. It was instructed to resort to arms only as a last exceeding that if possible to make its way peacefully through the country.

Crempel spent nearly two years exploring the little-known forcest regions of the French Congo. He added a great deal to our knowledge of the cannibal Fan, neoples of whom use till within a few years ago returned to France with a little black girl who had been given to him by a cheef who never believe had seen a white man. The child was put at a hold in France and proved to be a bright and studies little person. Cramped fid not with to last the chief was bent upon renarding it as an untriendly set if he declined to take her along the only free home among European have falsen previous the cannibals of the Congo has friendly feeling.

Only Frenchmen among Europeans have falsen previous to the cannibals of the white temple. The length of the to follow in Cramiel's footsteps. The Committee of French Africa had the enterprise in